

Work Order ID 77952

December-23-11 10:26:06 AM

77952

Page 11

Item ID: D206-642-151

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Réplacement Skidtube

Stop *NS2*

Start Date: 22/12/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/02/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: M.C.J

Date: 11/12/23

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3804	A
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IIN-D206-642	O
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100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-151

CHG001

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr.	Approval QC Inspector.

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1-Deburr Fwd edge of tube								
	2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804								
	3-Weld Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required. Pick: Qty Part Number DescriptionBatch A/R Aluminum Rod <u>m119712/m119785</u>								
	4-Grind weld flush to cap on top surface only.								
	5-Cut Aft end as per dwg D3804 from front of tube and Deburr								
	6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D3804								
	7-Open holes for Aft end cap as per Dwg D3804 with #30 Drill Bit using DT8025.								
	8-Drill pilot holes using Dt8166 & DT8169D & DT9771.								
	9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.								
	10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.								

RM/DP

12-1-25

8612-01-25

RM/DP

12-1-27

RM/DP

12-1-30

RM/DP

12-1-27

SAD

12-02-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 3

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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D3804

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D3804

15-C'sink GHW rivet holes as per Dwg D3804

16- Open Aft cap hole #6.
****no wearplate holes for this skidtube****

17-Deburr tube and blow out chips from inside the tube

SAO 12-02-02

SAO 12-02-02

S 12/02/02

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
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Page 4

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									
150	QC3- Inspect Part Finish	0.00							
150									
QC	Memo	0.00							
Quality Control									
160	Skidtubes	0.00							
160									
Skidtubes	Memo	0.00							
Skidtubes	1-Open holes to finished size as per Dwg D3804, (without cutting fluid)								
	2-C'sink crossbolt spacer holes as per Dwg D3804(without cutting fluid)								
	3-Deburr and blow out all chips from inside the tube								

④ MB2 / 12/2/2
CX

1 SAO 12-02-03

DL 12/02/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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December-23-11 10:26:06 AM

77952

Page 5

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N900040100Setup Start ***NS1***

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Start Date: 22/12/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/02/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

170 QC6- Inspect dimensions to drawing

0.00

170

1 0 BE 12-02-03

QC

Memo

0.00

Quality Control

180

0.00

180

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required

2-Bond D2654-1 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting

Start Date: 12-2-3 Time: 12:00
Finish Date: 12-07 Time: 3:00

Pick:

Qty Part Number Description Batch

A/RSikaflex-291 M119999

Sikaflex expire date:

2012-08-13

0/0 CF 12-2-3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Setup Start *NS1*

Stop *NS2*

Start Date: 22/12/2011 **Start Qty:** 1.00

1

Cust Item ID:

Required Date: 01/02/2012 **Req'd Qty:** 1.00

*** 1 ***

Customer:

Reference:

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code
---------	--------	-----------

**Accept
Qty**

Reject
QtyReject
Number

**Insp.
Stamp**

190

QC5- Inspect part completeness to step on W/O

0.00

190

QC

Memo

0.00

Quality Control

1 8 BE 12-02-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 7

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N900040100

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Revision ID:

Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 22/12/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/02/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

200

0.00

200

Skidtubes

0.00

Skidtubes

Skidtubes

Memo

1-remove alodine from around hole and prepare for welding

2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

QtyPart NumberDescriptionBatch

A/RAluminum Rod M119785

3-Grind welds flush as per Dwg D3804.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3804.

Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/RSS Rod NONE BE 12/02/09

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D3804. Deburr

BE 12/02/07

BB 12/02/08

D 12-2-13

W/O:		WORK ORDER CHANGES					
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Page 8

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N900040100

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Revision ID:

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Start Date: 22/12/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/02/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210		0.00							
210	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	Install D2680-041 Nut Plate as per Dwg D3804								
215		0.00							
215	QC9- Inspect visual per QSI004- Fusion Welds								
QC	Memo	0.00							
Quality Control									
220		0.00							
220	QC10- Inspect visual per QSI004- ground welds								
QC	Memo	0.00							
Quality Control									

① 3 12/02/08

12.02.13

1X 0

5 12/02/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 77952***77952***

Page 9

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1

Cust Item ID:

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1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

230

QC5- Inspect part completeness to step on W/O

0.00

230

QC

Memo

0.00

812/02/13

Quality Control

240

Pressure Wash per QSI005 4.3

0.00

240

HandFinish

Memo

0.00

Hand Finishing

1 of 10 12/02/14

250

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

250

Powdercoat

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

10:20:00
3200°F
10:50

1X4 ml 12/02/15

M119480

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 10

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1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260

QC3- Inspect Part Finish

0.00

260

QC

Memo

0.00

Quality Control

IRH ϕ ul n102/16

270

HandFinishing

0.00

270

HandFinish

Memo

0.00

Hand Finishing

1-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D3804. Clean excess adhesive.

IRH ϕ ul n102/16

W/O:		WORK ORDER CHANGES					
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77952

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Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	HandFinishing	0.00							
280									
HandFinish	Memo	0.00							
Hand Finishing	1- Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive A/RSikaflex-291 <u>11/11/08</u> Sikaflex expire date: <u>12/08</u> 2- Install wearplate as per dwg 2-Wing Walk as per Dwg D3804 and QSI 005 4.4 Batch: <u>11/11/08</u>								
290	QC3- Inspect Part Finish	0.00							
290									
QC	Memo	0.00							
Quality Control									

IRH 12/06/21

IRH 12-2-21

W/O:		WORK ORDER CHANGES					
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Page 12

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Start Date: 22/12/2011 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 01/02/2012 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
300 *300* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							
310 *310* Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPP D206-642-151 Location: _____ PPP Rev: _____	0.00 0.00							
320 *320* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

PH

1 mfg BL 12-2-21

PPP 26712

12/2/21

12/2/21

mf 12-02-21

W/O:		WORK ORDER CHANGES					
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Picklist Print

December-23-11 10:26:10 AM

Page 1

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77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 10.12.08 PER IIN REV.N DD VERF:EC IPP
REV:B 11.09.16 PER IIN REV.O DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2620		Manufactured	No			110	Each	13.0000	1	1			
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D2620

Skidtube, 206 Skidtube

Location

Loc Qty

Loc Code

LG 77996
71616
71617
75470
75587

13
3
6
2
2

①

RM 12-1-25

D2647		Manufactured	No			110	Each	183.0000	1	1			
-------	--	--------------	----	--	--	-----	------	----------	---	---	--	--	--

D2647

Cap

BE 12-01-25

Location

Loc Qty

Loc Code

LG002
73826
75482

183
74
109

1

W/O:		WORK ORDER CHANGES					
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77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-04

Purchased

No

180

Each

12,557.00

52

52

CR3212-4-04

Cherry Rivet

**

SAD 12-02-03

Location

Loc Qty

Loc Code

ST331

2567

116471

78

117816

3

118686

1

118840

16

119017

2459

119075

10

st510

9990

119075

9990

D2654-1

Manufactured

No

180

Each

0.0000

1

D2654-1

Web

~~B77279~~ **

SAD 12-02-03

D3286-1

Manufactured

No

180

Each

178.0000

2

2

D3286-1

Doubler

OR ~~B77281~~ **

SAD 12-01-02

Location

Loc Qty

Loc Code

LG002

178

74872

6

75484

54

B76772

(2)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-23-11 10:26:10 AM

Work Order ID: 77952

77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

200

Each

634.0000

19

19

D2649

Cross Bolt Spacer

**

BE 12/02/07
B 78020 * 19

Location

Loc Qty

Loc Code

LG001

634

65317

1

68224

2

68507

11

71355

2

72704

2

72841

11

73390

8

73857

21

73858

53

73859

4

73860

4

76793

515

D3286-3

Manufactured No

200

Each

18.0000

2

2

D3286-3

Spacer

**

BE 12/02/08
B 78015 * 2

Location

Loc Qty

Loc Code

LG001

1

74117

1

LG002

17

75483

17

D2680-041

Manufactured No

210

Each

64.0000

1

1

D2680-041

Nut Plate

**

BE 12/02/08
B 78015 * 1

Location

Loc Qty

Loc Code

ST020

64

75479

64

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-23-11 10:26:10 AM

Work Order ID: 77952

77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

210

Each

1,762.000

2

2

CR3212-4-03

Cherry Rivet

**

2 12/02/08

Location

Loc Qty

Loc Code

FP002

768

114859

768

ST331

994

110139

2

119017

992

AN960JD416

NAS1149D0463J

Purchased

No

210

Each

0.0000

1

1

AN960JD416

Washer

**

1118384 (x1) 11/02/16

CCR264SS3-3

Purchased

No

210

Each

993.0000

2

2

CCR264SS3-3

Cherry Rivet

**

2 12/02/08

Location

Loc Qty

Loc Code

ST331

993

113973

2

117849

147

119017

844

MS27039-4-06

Purchased

No

210

Each

323.0000

1

1

MS27039-4-06

Screw

**

11 12/02/16

Location

Loc Qty

Loc Code

ST292

323

119075

323

yl

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-23-11 10:26:10 AM

Work Order ID: 77952

77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

D2651-1

Manufactured No

270

Each

357.0000

6

6

D2651-1

Plug

**

B78584 (x6) JH 12/02/16

Location

Loc Qty

Loc Code

FP001

357

57869

1

66445

10

69018

2

70839

2

71037

31

73827

311

D2651-3

Manufactured No

270

Each

847.0000

6

6

D2651-3

O-Ring

**

B78126 (x6) JH 12/02/16

Location

Loc Qty

Loc Code

FP001

847

61962

12

73828

835

D3873-1

Manufactured No

280

Each

611.0000

14

14

D3873-1

Bushing

**

B79560 (x14) JH 12/02/17

Location

Loc Qty

Loc Code

ST088

611

64760

1

68247

4

73829

19

73830

2

76792

585

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 6

December-23-11 10:26:10 AM

Work Order ID: 77952

77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

D2646

Manufactured No

280

Each

153.0000

1

1

D2646

Aft Cap

**

u 12/02/11

Location

Loc Qty

Loc Code

FP002

153

62678

5

68280

5

70945

1

71038

4

71070

2

73294

1

73825

135

X1

D3805-041

Manufactured No

280

Each

1.0000

1

1

D3805-041

Wearplate Assembly Fwd, Low Gear

**

1376779 (X) u 12/02/11

Location

Loc Qty

Loc Code

FP001

1

75149

1

MS27039-1-08

Purchased No

280

Each

1,243.000

2

2

MS27039-1-08

Screw

**

u 12/02/11

Location

Loc Qty

Loc Code

ST291

1243

117423

77

118910

226

119075

440

119109

500

XZ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 7

December-23-11 10:26:10 AM

Work Order ID: 77952

77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

280

Each

6,837.000

7

7

MS21042L3

Nut

**

Jul 12/02/16

Location

Loc Qty

Loc Code

ST300

6837

117441

16

117885

32

118451

5

118927

3

119017

5988

119075

793

x2

D3805-045

Manufactured

No

280

Each

2.0000

1

1

D3805-045

Wearplate Assembly Aft, Low Gear

**

376789 (x1) Jul 12/02/16

Location

Loc Qty

Loc Code

FP001

2

73817

1

74896

1

AN960JD10L

NAS1149D0332J

Purchased

No

280

Each

0.0000

2

2

***AN960JD10L ***

Washer

**

1119042 (x2) Jul 12/02/16

AN3-37A

Purchased

No

280

Each

1,546.000

7

7

AN3-37A

Bolt

**

Jul 12/02/16

Location

Loc Qty

Loc Code

ST353

1546

117619

4

119086

1542

V7

December-23-11 10:26:10 AM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 8

December-23-11 10:26:10 AM

Work Order ID: 77952

77952

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 22/12/2011

Required Date: 01/02/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0363J

Purchased

No

280

Each

2,252.000

7

7

NAS1149D0363.J

Washer

11/20/14 2 (x3) MU nlor/16

Location

Loc Qty

Loc Code

ST298

2252

117601

61

118077

1

118612

18

118968

137

119537

2035

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	Qty -041	Qty -043	Part Number	Description
1	X		D3804-041	SKIDTUBE ASSEMBLY, 206 A/B LOW
2		X	D3804-043	SKIDTUBE ASSEMBLY, 206 A/B HIGH
5	1	1	D2600-1-160	EXTRUSION
6	1	1	D2646	AFT CAP
7	1	1	D2647	CAP
8	19	20	D2649	CROSS BOLT SPACER
9	6	8	D2651-1	PLUG
10	6	8	D2651-3	O-RING
11		1	D2654-3	WEB
12	1		D2654-1	WEB
13	1	1	D2680-041	NUT PLATE
14	2	2	D3286-1	DOUBLER
15	2	2	D3286-3	STUD
21	2	2	AN960JD10L	WASHER
22	1	1	AN960JD416	WASHER
23	2	2	CCR264SS3-3	RIVET
24	2	2	CR3212-4-03	RIVET
25	52	52	CR3212-4-04	RIVET
26	2	2	MS27039-1-08	SCREW
27	1	1	MS27039-4-06	SCREW

NOTES

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 12.5 lb
- 9) WELD PER DART QSI 004
- 10) BENDING: DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 11) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 12) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

SHOP COPY
RETURNED
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 779.52 M.C. J

11/12/23

RELEASED
09.03.03
per ECA 09-538

A	NEW ISSUE	MB	08.07.07
REV.	DESCRIPTION	BY	DATE
DESIGN	97		
DRAWN	97		
CHECKED	97		
MFG. APPR.	97		
APPROVED	97		
DE APPR.	97		
DATE	08.07.07		

DART AEROSPACE USA, INC	
PORT HADLOCK, WA	
DRAWING NO.	REV. A
D3804	SHEET 1 OF 5
TITLE	SCALE
SKIDTUBE ASSEMBLY, 206A/B	NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

RELEASED
09.03.03



DESIGN	99	DART AEROSPACE USA, INC	
DRAWN	99	PORT HADLOCK, WA	
CHECKED	99	DRAWING NO.	REV. A
MFG. APPR.	99	D3804	SHEET 2 OF 5
APPROVED	99	TITLE	SCALE
DE APPR.	99	SKIDTUBE ASSEMBLY, 206A/B	NTS
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

RELEASE
69-03-03



DESIGN	<i>97</i>	DART AEROSPACE USA, INC	
DRAWN	<i>1</i>	PORT HADLOCK, WA	
CHECKED	<i>97</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>BE</i>	D3804	SHEET 3 OF 5
APPROVED	<i>97</i>	TITLE	SCALE
DE APPR.	<i>1</i>	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONCEPT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR COPIES OR REPRODUCED IN ANY OTHER MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

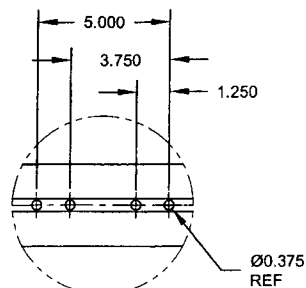
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

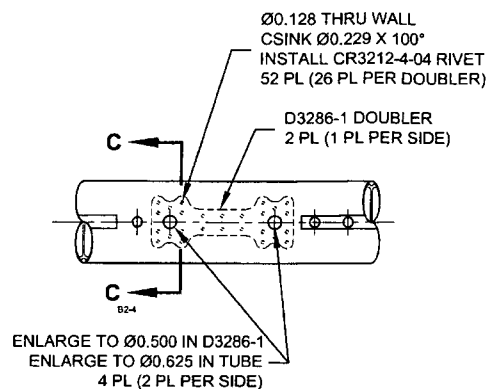
NOTE: Date & initial all entries

27952

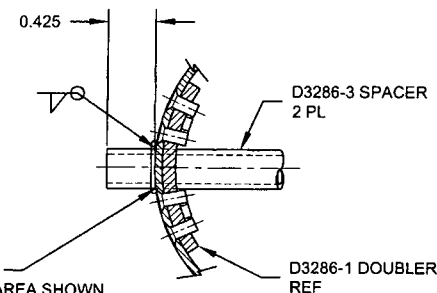
RELEASED
09.03.07



DETAIL A
SCALE NONE
D6-2
C2-2
D6-3
C2-3

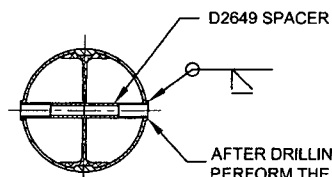


DETAIL B
SCALE NONE
C3-2
C3-3



- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH OUTSIDE SURFACE OF ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.03 X 45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

SECTION C-C
PARTIAL SECTION
SCALE NONE
C6-4



- AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.03 X 45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. CBORE TO Ø0.313 X 0.75 DP (EXCEPT WHERE INDICATED)

SECTION D-D
FOR Ø0.375 HOLES ONLY
SCALE NONE
A4-2
A4-3

DESIGN	97	DART AEROSPACE USA, INC	
DRAWN	97	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO. D3804	REV. A
MFG. APPR.	97	SHEET 4 OF 5	
APPROVED	97	TITLE	SCALE
DE APPR.	97	SKIDTUBE ASSEMBLY, 206A/B	NTS
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W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

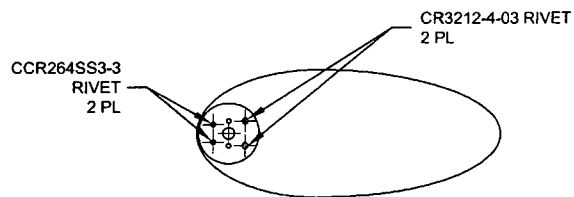
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

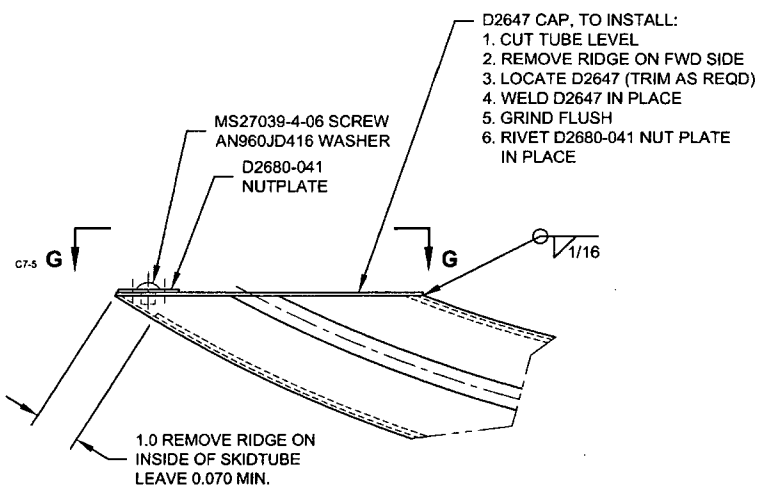
NOTE: Date & initial all entries

77952

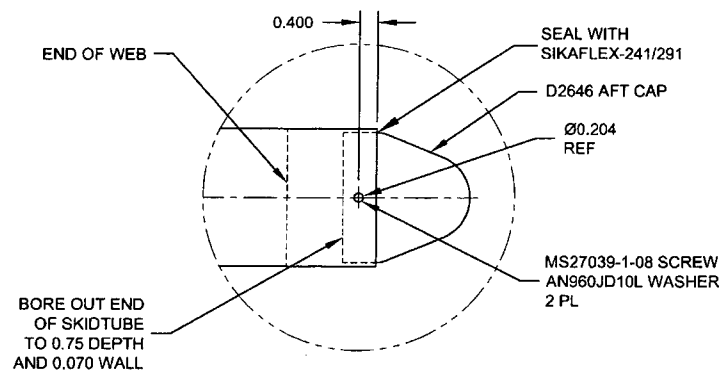
RELEASED
07 09 03 03



VIEW G-G
SCALE NONE A7-5



DETAIL E
SCALE NONE 87-2 87-3



DETAIL F
SCALE NONE 82-2 82-3

DESIGN	97	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	8	DRAWING NO.	REV. A
MFG. APPR.	8	D3804	SHEET 5 OF 5
APPROVED	10	TITLE	SCALE
DE APPR.	11	SKIDTUBE ASSEMBLY, 206A/B	NTS
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W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 25

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: 77982
Part number: 286-242-151
Description: 520446
Welding Process: Tig[] Mig[]
Base material: Aluminum
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Barclay Elliot Date of Test Coupon 12-21-25

Welder Barclay Elliot Date of Test Coupon 12-21-25

The above named individual is qualified in accordance with AWS D17.1 2001 to weld